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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/835,625	04/09/1997	EDWARD W. MOLL	M10043/20006	5281

7590 10/01/2002

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[REDACTED] ART UNIT

[REDACTED] PAPER NUMBER

2632

DATE MAILED: 10/01/2002

27

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 27

Application Number: 08/835,625

MAILED

Filing Date: April 9, 1997

OCT 01 2002

Appellant(s): Edward M. Moll

Technology Center 2600

Scott M. Slomowitz
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed February 7, 2001.

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(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

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(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1, 55, and 67-70 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *ClaimsAppealed*

A substantially correct copy of appealed claim 4 appears on page 29-30 of the Appendix to the appellant's brief. The minor errors are as follows: The amendment filed 10/12/99 has changed line 3 of the claim from "such emissions" to --biomagnetism or electrical potentials--.

(9) *Prior Art of Record*

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,474,082	Junker	12-1995
5,594,849	Kuc et al	1-1997
4,949,726	Hartzell et al	8-1990

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5,325,133

Adachi

6-1994

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 55, 67-70 are rejected under 35 U.S.C. 112, first paragraph. This rejection is set forth in prior Office action, Paper No. 21.

Claims 1, 4, 9, 12, 15, 17, 21, 38, 40, 51, 55, and 67-70 are rejected under 35 U.S.C. 102(b). This rejection is set forth in prior Office action, Paper No. 21.

Claim 2 is rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office action, Paper No. 21.

Claim 18 is rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office action, Paper No. 21.

Claims 44 and 45 are rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action, Paper No. 21.

(11) *Response to Argument*

The declaration under 37 CFR 1.132 filed 10/12/99 is insufficient to overcome the rejection of claims 1, 2, 4, 9, 12, 15, 17, 18, 21, 38, 40, 44, 45, 51, 55, and 67-70 based upon Junker, Kuc et al, Hartzell et al, and Adachi as set forth in the last Office action because: The information disclosed therein does not sufficiently address how the localization of EMG

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and MRI information can be linked to “thoughts” as repeatedly presented in the claims. Particularly, a review of the paper written by Bocker addresses the localization of surface potentials as a relation to MEG and EEG readings for different muscular movements, but not as a relation to thoughts.

In response to the appellant’s arguments regarding the rejection under 112, first paragraph, the appellant consistently returns to the same statement regarding the alleged novelty of their system: that it reads and recognizes “thoughts” and “thought patterns”. How does it do this? According to the brief, it is through biomagnetic potentials at particular precise locations in the brain of the user. This is said to be consistent with a particular thought of the user. However, a review of the subject matter presented in the declaration mentioned above, notably the Bocker reference, reveals nothing about information regarding “thoughts” but rather how localization of surface potentials and readiness potentials, i.e. biomagnetic potentials, occur before certain muscular movements. A link has evidently been found between biopotentials and motor functions. The appellant goes on to cite coordinates where these potentials occur. However, it is submitted that the appellant has taken this information and “read into” the statements therein a bit too much. Scientists have localized biomagnetic potentials corresponding to movements so these must be related to thoughts, or so the appellant would like to claim. This seems akin to trying to create a full sentence (“reading thoughts”) when one is only given a noun (biomagnetic localization). Herein lies the flaw in the appellant’s logic. It is submitted by the Examiner that the appellant has been reckless in their

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use of the word "thoughts", using it as a blanket statement to counter any argument presented by the Examiner. The invention does not merely measure biomagnetic potentials, it reads "thoughts". The invention does not merely utilize EEG readings, it reads "thoughts". The invention does not merely use MRI, EMG, MEG, or any other prior art system to localize bioelectrical potentials as their system seems to perform, it reads "thoughts". (The Examiner notes a seeming discrepancy in the appellant's brief; namely, page 13, lines 2-4 state that their invention "utilizes the fact that biomagnetic potentials at particular locations in the brain of the user are found to be consistent with a particular thought". Furthermore, page 14, lines 3-7 discuss how these "thoughts" corresponding to these biomagnetic potentials are used to control a computer. However, further down page 14, lines 17-20, the appellant states that the invention is "not at all the same thing as simply detecting biomagnetic potentials to influence the control of a computer", as characterized by the Examiner. It seems that this is precisely what they said earlier in the brief. So which is it?) In response to the appellant's statement that no prior art has disclosed, taught, or even suggested utilizing the distinct stimuli detected by a thought and used it to control an apparatus such as a computer, the Examiner states: Neither has the appellant's system. Who's to say that these potentials are exactly linked to thoughts in the first place? These changes in potential, are they really linked to specific thoughts or are they merely the electrical impulses that are used to perform motor control the person has enacted? If these are indeed thoughts, the Examiner wonders: Is reading these thoughts akin to surveillance systems the CIA would love to have to search the brains of

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potential spies? When you get down to it, is there any practical use for this complex and expensive system other than allowing the quadriplegic billionaire the ability to print a document off the computer? Why are we stopping with reading thoughts to print documents in the first place? Let's run factories! Control power grids! Coordinate shipping lanes, train schedules, mail delivery, telephone switching! As long as we're at it, let's use our thoughts to feed the hungry, print more money, and lower global warming! I'll bet we could use our collective brain power to produce electricity for some third world country!

Does this sound silly? It does to the Examiner. But the point is, the appellant appears to base their entire system on prior art systems and then assign it abilities that are just not there. If the invention localizes biomagnetic potentials, the Examiner suggest that the appellant claim it localizes biomagnetic potentials and face a possible prior art rejection. If it does indeed "read thoughts", claim it reads thoughts and present some evidence other than prior art MSI, MEG, and other such systems to perform this feat.

As for the rejection based on 102(b) as being anticipated by Junker, the appellant states that the prior art device relies on detecting and comparing frequency spectra emitted by the EEG and EMG signals rather than thoughts. The misnomer of detecting thoughts has been addressed above. As for the statement that only partial control of the computer is capable through Junker, the Examiner states that partial control is still control and claim 1 teaches "an apparatus for controlling a computer operation". As Junker meets the claimed subject matter, the rejection is considered proper. The appellant then states that Junker does not disclose how

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the user controls signals or a plurality of signals simultaneously. Nowhere in claim 1 is there any mention of simultaneous control. Also, MSI is not mentioned in claim 1 but is rather used in a dependent claim in which another reference is used. The appellant continues to argue how Junker does not detect the thoughts of the user; however, as mentioned in a previous Office action, the prior art system performs the same function as the appellant's system. As the prior art system is capable of performing the claimed subject matter, the rejection is considered correct and proper. Furthermore, the appellant's assertion that Junker performs its functions "*in the absence of specific thought knowledge*" is incorrect as the reference detects the ability to control and detect specific muscle groups with its invention. The EEG and EMG biopotentials used in Junker are as much related to specific thoughts as the appellant's system appears to be. In response to the assertion that feedback is not used in the claimed invention as it is in Junker, the Examiner reiterates that the prior art reference performs the function of

controlling a computer function using biomagnetic potentials similar to the claimed invention.

*this is performed with or without feedback is immaterial as the performed end result
is the same.*

In response to the arguments concerning rejections under 103(a) over Junker in view of Kuc, the Examiner notes that the appellant states the Junker reference does not teach or even suggest implementing localization. Nowhere in claims 1 or 2 is there any mention of localization. The Kuc reference was introduced to present evidence of magnetic source imaging as presented in claim 2. For this reason the rejection is considered proper.

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sheet
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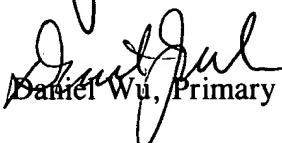
In response to the arguments concerning rejections under 103(a) over Junker in view of Hartzell, the appellant states that the Hartzell reference does not mention stimuli that are usable by the computer for security or identification of users. This intended use of the stimuli must result in a structural difference between the claimed invention and the prior art. As the Hartzell reference comprises databases for storing unique stimuli, the rejection is considered correct and proper.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


JOHN TWEEL
PRIMARY EXAMINER

JAT
September 26, 2002


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